

Consumers' Guide

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HOW MUCH MILK ?
FACTS FROM THE NATIONAL MILK SURVEY

Consumers' Queries and Comments

"Science, we say, has given us the means of plenty, and now social organization must show us how to use this instrument. Actually, science has not given us the means of plenty until it has solved the economic and social as well as the technical difficulties involved. The scope of science is life as a whole, and not just certain limited aspects of life."

Henry A. Wallace
Secretary of Agriculture

C A CROSS-SECTION of the people who are interested in studying consumer problems and learning some of the facts behind them shows up in the mailing list of the CONSUMERS' GUIDE. Analysis of our circulation in seven States: Alabama, California, Illinois, Massachusetts, Missouri, Texas, and Wisconsin, puts housewives well up on the list. Eleven percent of our readers in these States report that occupation. Factory and white-collar workers represent 14 percent; teachers of agriculture and other subjects, 10 percent; extension workers, 8 percent; teachers of home economics and other dietitians or nutritionists, 7 per-

cent; clergymen and other professional workers, not counting teachers, account for 6 percent; 5 percent go to municipal, State, or Federal officials; 4 percent to farmers. Three percent of our circulation in the seven States goes to editors or publishers; another 3 percent to merchants and manufacturers; 2 percent to librarians; and 1 percent to social or welfare workers. Occupations of others are not known.

C "I WAS interested in the idea of Government research aiming toward meat palatability", writes a reader of our recent article on veal and lamb. "I can visualize Government experts judging many technical points on raising meat animals but how do these technicians go about the idea of the business of pleasing the consumer's palate?"

COOPERATIVE STUDIES in the Department of Agriculture provide the answer to this consumer's question. For the last 10 years researchers in the Bureau of Animal Industry have had the help of the Bureau of Home Economics and the Bureau of Agricultural Economics as well as the State experiment stations. Sheep bred with certain qualities on certain rations by certain "management" methods are compared scientifically. They are slaughtered, cut up, and graded according to a uniform procedure. Then samples of the meat are analyzed in the physics and chemistry laboratories. Measurements are taken, the color of the fat and lean is recorded, and whether it has a coarse or fine texture.

EXPERTS in the Bureau of Home Economics cook the meat the

approved way, record how much weight is lost in cooking. Then, since the proof of the pudding is in the eating, the lamb goes through that test, too. A committee from the different cooperating bureaus eats the finished product and judges between the pieces of meat from the animals of different breeding, feeding, and management. They try to keep human variability to a minimum, using mechanical tests for tenderness, and working for a correlation between chemical content and flavor. Besides flavor and tenderness, lamb is judged on aroma, texture, and juiciness.

C EGG consumers in New York City were recently asked by researchers from the University of Missouri what, if any, was their preference in the color of egg yolks. Replies to these questions showed that one-third of the consumers preferred light yolks, one-third dark yolks, one-fifth yolks of medium color, and the remainder had no preference. The investigators concluded that paying an extra price for any yolk color is not justified from the standpoint of either the consumer or the distributor. . . . Some of the consumer preference for lightness or darkness of color in yolks is based on misunderstanding of its significance in food value. Color in yolks is influenced by the character of feed given to hens. If hens get plenty of green stuff to eat, the yolk tends to be darker yellow, and to be high in Vitamin A. But hens given cod liver oil with their feed may produce eggs with yolks light in color and also high in Vitamin A. There is no

[Concluded on page 10]

How Much Milk?

Facts from the final report of the National Milk Survey made by the Consumers' Counsel with the help of women in 59 cities.*

TAKE IT in whatever form you like, some milk—nutritionists say—should be included in the everyday diets of every family. Milk contains an abundance of calcium and other essentials which are likely to be deficient in diets without milk.

HOW MUCH milk is needed and how much is desirable depends somewhat on the makeup of the rest of the diet, but for most families between 3 and 5 quarts per person a week will provide a satisfactory allowance.

THREE quarts for the average family will do if it must. Five quarts is better. For the ordinary sized family, 3 quarts would allow 1 pint per child and 1 cup per adult. Five quarts would allow between 3 and 4 cups a child and 1½ to 2 cups an adult.

TWO years ago, committees of women in 59 cities, working with the Consumers' Counsel of the AAA, set about getting at the

facts of actual consumption of whole and evaporated milk. They gathered reports covering one week in April or May 1934, from 28,966 families, some of whose children went to school in slum districts, some in industrial areas, some in middle-class or better districts.

FACTS which these women collected have now been analyzed, evaporated milk consumption has been translated into the equivalent of whole milk, and these are some of the results that stand out:

529 families reported that they bought no milk at all.

4,126 families reported that they purchased less than a quart a person weekly, and more than half of that quart represented evaporated milk.

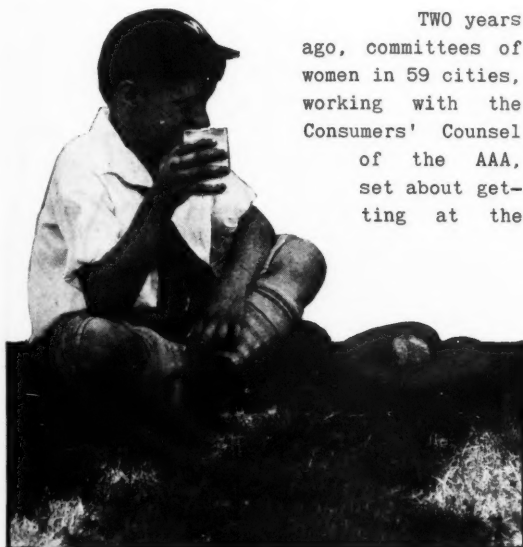
More than two-thirds of the 28,966 families consumed less than 2 quarts per person weekly.

FAMILIES in only 8 of the 59 cities reported an average consumption of whole and evaporated milk as high as 3 quarts a week per person.

ALL but 5 percent of the families consumed an average of less than 5 quarts of these kinds of milk per person.

AVERAGE consumption for all 28,966 families was 2.44 quarts of whole milk and the

*Full report of the results of the National Milk Survey will be published shortly under the title "A Survey of Milk Consumption in 59 Cities in the United States." Copies may be obtained by addressing the Consumers' Counsel, Agricultural Adjustment Administration, Washington D. C.



whole milk equivalent of evaporated milk—18.7 percent less than the 3 quarts called for in emergency diets of 3 quarts a week and less than half of the adequate standard of 5 quarts a week.

RECOMMENDED standards include milk in whatever form. Reports gathered in the National Milk Survey refer only to whole and evaporated milk. They do not include such other forms as skim or dried milk, buttermilk, ice cream, or cheese, in which milk might have been consumed by these families. Conceivably in some instances the addition of these other forms might bring the amount of milk consumed closer to desirable standards. This must be a guess only, since no figures are available from which to estimate how much skim or dry milk or buttermilk are consumed by the average person; ice cream consumption by such families as are included in this study cannot even be hazarded. One careful estimate of the weekly per capita consumption of cheese puts the amount at only 0.08 pound.

OTHER limitations of data must be noted. No facts are known about milk which these families might have purchased and consumed away from home. With children, milk consumed at school should be an important part of the weekly quota, but from milk facts reported for public-school systems in 45 of the 59 cities it was learned that milk consumption at school for this group averaged only 0.15 of a quart a week.

SOMETIMES nationality and race make a difference in food habits. No information on these factors was collected. By the method of selecting the families, no attempt was made to get a completely representative picture of milk consumption by all families in each city. Families in extreme poverty, without children or too poor to have their children in school during those weeks, were not included. If there was

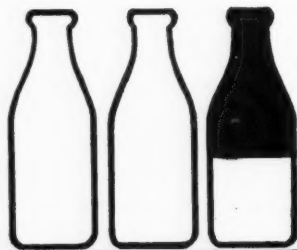
any overemphasis of any economic group in any of the cities it was in the direction of low-income families.

NO DOUBT remains, however, after surveying the results of this study, and after making due allowance for its limitations, that the facts point to a grave deficiency in the average amount of milk consumed by a large number of families.

CONCERN over the dangerous hazards to health from underconsumption of milk was what led a committee of women from 12 national organizations to ask that this survey be made. During 1933 and 1934 Federal and State emergency relief agencies were reporting a large increase in the number of cases of malnutrition among children. This committee of women called on the Secretary of Agriculture in the spring of 1934 and asked his help in getting at the facts of milk consumption.

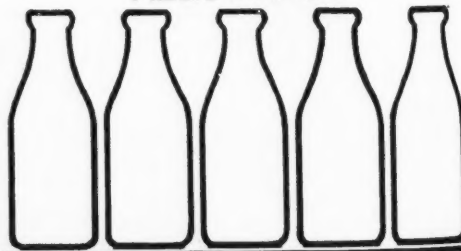
"WE are prompted to make this request", they said, "by the apparent grave underconsumption of milk, and wish to learn more concretely than has ever been done before how much milk is being consumed by those who need it most. We feel that the facts obtained in such a survey are vital to the solution of the milk problem and we are sure that it will arouse the widest interest of the women of the United States."

WHAT THEY GOT



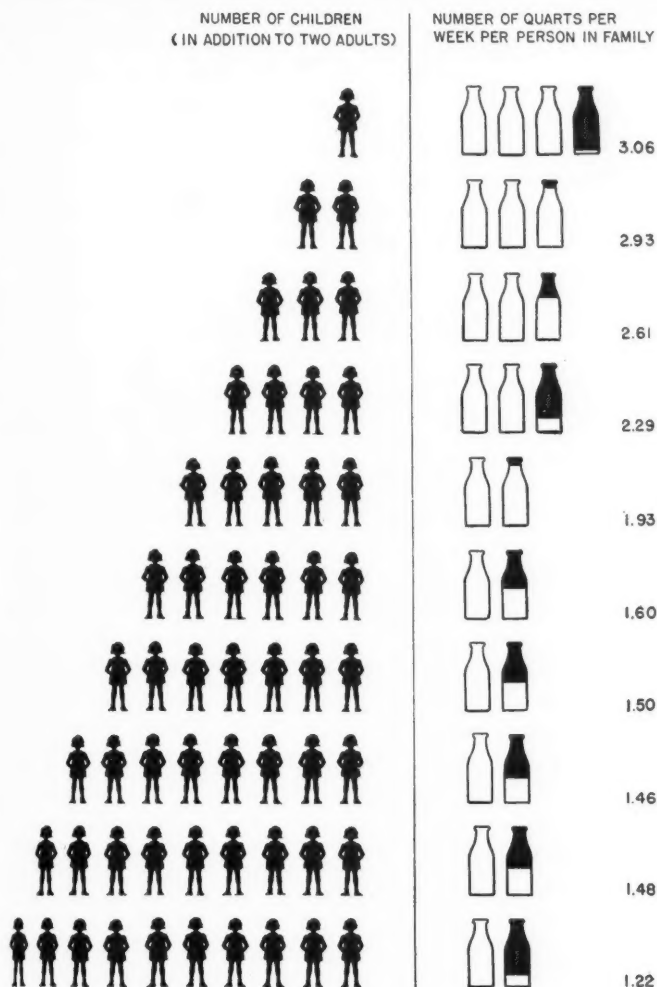
WEEKLY PER CAPITA CONSUMPTION OF WHOLE MILK AND WHOLE MILK EQUIVALENT OF EVAPORATED MILK WAS 2.44 QUARTS. (THIS DOES NOT INCLUDE MILK CONSUMED IN OTHER FORMS.)

A SATISFACTORY ALLOWANCE -



FOR MOST FAMILIES, NUTRITIONISTS SAY, WOULD BE BETWEEN 3 AND 5 QUARTS A PERSON EACH WEEK. THREE QUARTS WILL DO IF IT MUST. FIVE QUARTS IS BETTER. FOR THE AVERAGE FAMILY 3 QUARTS WOULD ALLOW ONE PINT PER CHILD AND ONE CUP PER ADULT; 5 QUARTS WOULD ALLOW BETWEEN 3 AND 4 CUPS PER CHILD AND 1 1/2 CUPS PER ADULT.

THE GREATER THE NUMBER OF CHILDREN THE SMALLER IS MILK CONSUMPTION



INSTRUCTED by the Secretary of Agriculture to undertake this survey, the Consumers' Counsel set to work. A list of 63 cities was drawn up; some large, some small (four cities later had to be omitted). Care was taken to include those which would show an equitable geographic distribution of the population of the country. Local committees of women were asked to help in distributing and collecting the questionnaires, and in tabulating the preliminary results. (Final tabulations were made by the Consumers' Counsel.) Local committees asked their municipal authorities to select three schools representative of a poor or slum dis-

trict, an industrial area, a higher income district. Each school principal then received 250 questionnaires. Principals gave these questionnaires to children, selected at random, to take home and ask their parents to furnish the information, and then return the questionnaire to the school. A few families without school children were included in the number of questionnaires returned.

RETURNS from 28,966 families gave such data as these: The number of people in each family; the number of children of school age, from 5 to 16 years; the number of children under 5; purchases of whole and evaporated milk; the amount obtained which was not purchased. For 19,427 families, family incomes were reported. Included in this number were 9,728 families, each with 2 adults, some with no children, others with from 1 to 10 children.

HIGHEST consumption of whole milk and the whole milk equivalent of evaporated milk among all the 59 cities were reported by families in Reno, Nev., where the average amount consumed weekly was 3.42 quarts per person. Other cities reporting an average of 3 quarts or more were Boise, Idaho, Seattle, Wash., Fargo, N. Dak., Burlington, Vt., Boston, Mass., and Minneapolis, Minn.

LESS than a 2-quart average was reported for 8 cities, with the lowest consumption for all cities in Charleston, S. C., where the average, pulled down by low milk consumption by negro families, was only 1.23 quarts. The other 7 cities were: Winston-Salem, N. C., Richmond, Va., Pueblo, Colo., Baltimore, Md., Gary, Ind., Louisville, Ky., and Oklahoma City, Okla.

NORTHERN and western families showed a better record for milk consumption than did southern families, due in part probably to the larger number of dairy cattle and dairy farms in the former regions. Other factors such as income, the cost of milk, and ignorance of the

importance of this food in the diet, too, bear on variations in milk consumption.

CITIES in Pacific Coast States showed the best average record. For the 5 in that region the average consumption was 2.75 quarts. Close second was the West North-Central area, where the average for 7 cities was 2.71 quarts.

BOTTOM on the list of those areas was the South Atlantic. Nine cities in this region reported an average of only 1.93 quarts per person a week. In none of the other 8 regions did the average consumption drop below 2 quarts.

ALMOST 80 percent of all the families reporting from South Atlantic cities showed they were getting less than 3 quarts a week. Nearly as large a proportion of families in East South-Central cities fell below this low level. Even in New England, West North-Central, and Pacific cities close to 60 percent of the families failed to get 3 quarts a person a week.








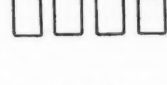
IMPORTANCE of evaporated milk varied greatly, also, from city to city. Consumption of milk in this form was reported from all cities. In three—Butte, Mont., Globe, Ariz., and Charleston, S. C.—the proportion of milk consumed as evaporated averaged from 37 to 39 percent of the total. In 10 cities, the average was less than 10 percent. These included: Fargo, N. Dak., Minneapolis, Minn., Sioux Falls, S. Dak., Burlington, Vt., Lawrence, Mass., Manchester, N. H., Oshkosh, Wis., Louisville, Ky., Washington, D. C., and Wichita, Kans.

EVAPORATED milk was a big item in the milk consumption of negro families reported on in Baltimore and Charleston, S. C. Records from negro families in the latter city showed that 45 percent of their milk was in this form; those in Baltimore reported 21 percent as evaporated.

BIG families, little milk; big incomes, more milk—these two important relationships run through the data which the families reported.

FAMILIES with the lowest consumption per person, it was found, were almost always families with the largest number of children. Put another way, this serious fact is still true: The greater the number of children, the

THE GREATER THE FAMILY INCOME THE GREATER IS MILK CONSUMPTION

AVERAGE WEEKLY INCOME	QUARTS PER WEEK PER PERSON IN FAMILY	
UNDER \$5		1.73
\$5 UP TO \$10		1.65
\$10 " " \$15		2.00
\$15 " " \$20		2.44
\$20 " " \$25		2.77
\$25 " " \$50		3.21
\$50 " " \$75		3.56
\$75 " " \$100		3.62

less milk consumed on the average by each member of the family. Furthermore, families with low milk consumption per person were families with a greater proportion of children below school age, the period when a deficiency in milk can perhaps do most permanent damage.

RECORDS of 9,728 families each with 2 adults were studied to see how consumption of whole and evaporated milk changed with the size of the family. Largest per capita consumption was reported by such families who had one child. Their average was 3.06 quarts a week for each person. Families with 2 children consumed 2.93 quarts per person; with 3 children, 2.61 quarts. Almost without exception, with each increase in the number of children the per capita consumption decreased, until with families of 10 children the average was only 1.22 quarts a person.

EVEN if the 2 adults in each family had gone without milk entirely, the average

amount of milk consumed, it is estimated, would have been below 2 quarts a child in all groups of 7 children and more and below 3 quarts in all groups of 5 children and more.

INCOME, too, obviously had much to do with the amount of milk families could buy. Large families were usually found to have low income. With pressure from both ends—little money coming in and heavy expenses—the chance for an adequate supply of milk did not come within reach of such families.

THE BIGGER the family purse, the better the chance for larger milk consumption is supported by the data collected from 19,427 families. (Other families did not report their income.) Families whose members were each getting less than 1 quart of milk a week had an average income of \$13.21, which meant \$2.04 for each person because these families had an average of 6.5 people in them. Over half, 55 percent, of the income of such families was spent on food and yet, either because milk was expensive in relation to the money available for food, or because the families were unaware of the importance of milk, the amount of whole or evaporated milk consumed was one-third only of the minimum amount the body should have even for emergency periods.

SEPARATE count of incomes was made of 9,728 families from whom records received were complete. In this group, the restricted diet level of 3 quarts per person a week was not reached by any of the families with incomes smaller than \$25 a week and 57 percent of the families had incomes of less than \$25.

COST of milk in relation to income apparently is not the only hold-back on better milk consumption. The records of 52 families showed that, even with relatively high incomes of \$100 a week and above, consumption of whole and evaporated milk averaged only 3.43 quarts a person, although most nutritionists recommend in their suggested adequate diets at least an average of 5 quarts of whole milk or its equivalent each week.

CITY by city, the records show the close relation between low milk consumption and low income. Such uniformity suggests that this

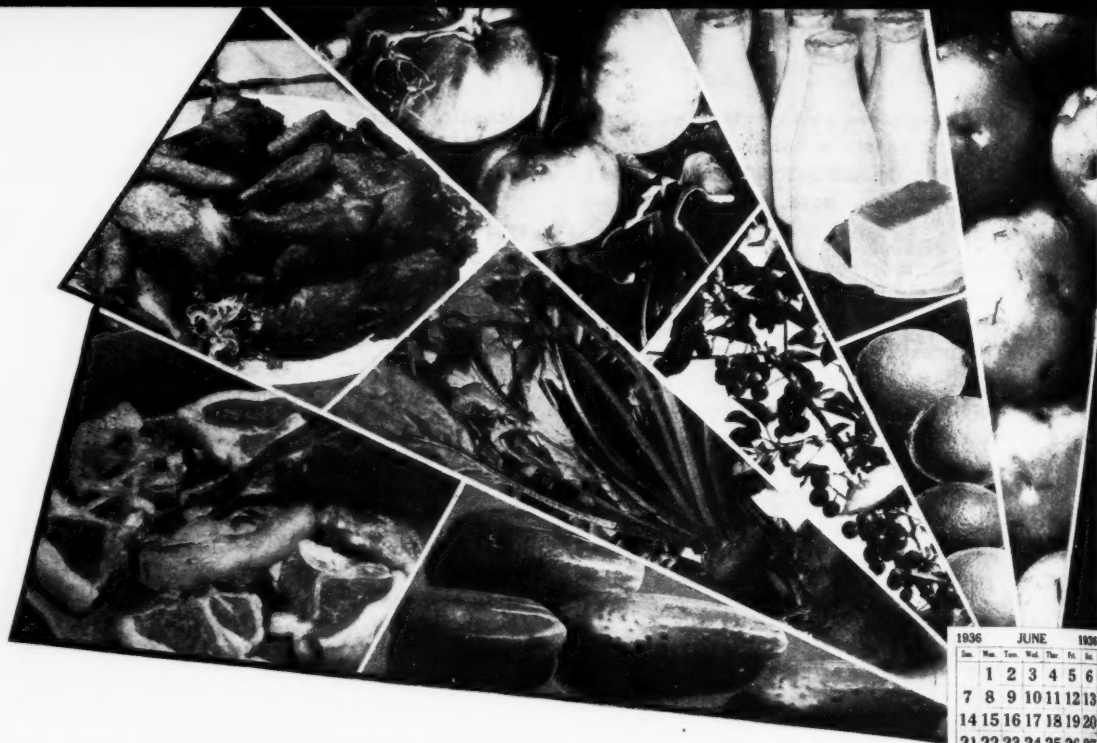
condition cannot be due primarily to race, nationality, or climate. In Charleston, S. C., where the average consumption of all families was lower than in any of the 59 cities, families consuming less than 1 quart per person a week had incomes of less than \$22; those consuming from 4 to 5 quarts a person had about \$37 a week to spend. Reno, Nev., with the record for highest per capita consumption, shows that families in that city consuming less than 1 quart a week per person had an average income of less than \$24, while those consuming between 4 and 5 quarts had incomes averaging about \$33 a week.

THIS SURVEY did not attempt to get an answer to the question as to whether families would buy more milk if its cost, in relation to their incomes, was lower. That is a major question which needs answering.

WHATEVER proof can be found on one side or the other of this question, three vitally important facts stand out from the present survey: (1) Consumption of milk by thousands of families comes nowhere near an adequate standard for building and maintaining strong bodies. (2) The larger the family, the lower is milk consumption. Children in such families may be penalized for life because of lack of the important food nutrients in milk. (3) Low incomes go along with low milk consumption.

TWO YEARS ago, in launching the National Milk Survey, the Consumers' Counsel wrote: "I do not think that it is the moral responsibility of the Nation's dairymen to bear without help the burden of providing dairy products to that portion of the consuming population unable to pay a fair price for the dairy-men's product. Society as a whole must recognize this problem of providing adequate milk supplies to needy children.

"THE PURPOSE of this survey", he continued, "is not only to measure the extent of the problem of underconsumption but to focus public attention on a grave national responsibility. Out of this effort we hope to see a quickened social consciousness on the part of consumers and all businesses interested in the distribution of milk to the needy for meeting at least the minimum milk requirements of all our people, no matter how poor."



1935		JUNE							1936
Sun.	Mon.	Tue.	Wed.	Thur.	Fri.	Sat.			
	1	2	3	4	5	6			
7	8	9	10	11	12	13			
14	15	16	17	18	19	20			
21	22	23	24	25	26	27			
28	29	30							

Foods of the Month

June brings the year's highest supplies and lowest prices on some of our most important foods.

CHOOSING only the foods that come to market in peak volume in June, and adding very little from the staple grocery shelf, consumers could plan menus complete in every detail from food value to flavor.

MEATS taking a June lead are lamb, veal, and three kinds of chicken. Stewing chickens are still on the market, broilers are at their best, and fryers are opening their season which goes on through October. Squabs start coming to market in June, continuing through September, and ducks are in the height of their May-December season. (See "Fresh Poultry Calendar" in the Aug. 5, 1935, CONSUMERS' GUIDE).

MILK reaches its peak production in June when pastures are green, but since the consumer demand is fairly stable over the year, retail prices for fluid milk go down little if any in June. But the surplus milk goes into butter which does reflect its high quantities in

low June prices. Eggs, though highest in quantity and lowest in price earlier in the spring, in the average year, are still bargains in food value in June.

VEGETABLES always present a wider and cheaper choice to consumers during the summer months. In the usual year, more cucumbers, beets, potatoes, and tomatoes come to a typical city market in June than in any other month. Spinach, kale, onions, snap beans, and peas are still almost as plentiful as they were in May, their month of biggest receipts in city markets. Lettuce and squash are ascending close to their July high point, and consumers can get first tastes of corn and lima beans, which save their real volume for July and August. (See "All-Year Vegetable Calendar" in the May 20, 1935, CONSUMERS' GUIDE.)

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CHERRIES make their year's big showing in June. Bananas and lemons reach a high in their steady year-round supply. Limes, not so dependable a standby in the all-year market, rise to a convenient peak for June cold drinks. Pineapples, strawberries, and rhubarb, while falling off a bit from their May bounty, still come near the head of the June parade. Melons, usually due to reach their heights of supply of all kinds in July and August, sometimes provide more cantaloups in June than in any other month. July is the berry month, but June sees raspberries, blackberries, gooseberries, and blueberries off to a running start. (See "All-Year Fruit Guide" in the July 8, 1935, CONSUMERS' GUIDE.)

LEAN MEAT makes practically the same important contribution to nutrition, no matter what animal it comes from: The particularly useful protein for building and repairing body tissues; minerals, especially iron and phosphorus for healthy red blood; Vitamins B and G for stimulating the processes that help to keep us fit. Chicken is special in its "excellent" supply of Vitamin B. The dark meat of poultry is richer than the light in iron. Government grades help in selecting the choicest June meat. U. S. Prime or Grade A is the top grade you'll usually find on the market in poultry, lamb, veal, or calf (older than milk-fed veal; see May 6, 1935, CONSUMERS' GUIDE.)

EGGS rate high for so many precious nutrients that they are frequently good buys when they are not at their cheapest. June prices are usually only a little higher than their April low. Nutritionists urge that we find a place in the budget at least for four egg yolks a week for babies and young children. Eggs supply protein, fuel, iron, calcium, phosphorus, and are "excellent sources of Vitamins A and G"; also of the rare sunshine Vitamin D, especially at this time of year, and contain some Vitamin B. (For Government grades and State laws by which to buy eggs, see Feb. 24, 1936, CONSUMERS' GUIDE.)

BUTTER is most favored by nutritionists for its high supply of Vitamin A and also of Vitamin D, which does not come with the other fats we may substitute for butter. Extra supplies of these vitamins usually go into butter made at this time of year when cows are eating

the green vitamin-rich pasture and living in the sunshine. Some dairy cows receive vitamin-enriched feed even in the winter and the resulting butter is also rich in vitamins, but this season's butter is most certain to have the extra vitamin value.

BUTTER GRADES are coming into use in some States and though they do not affect food value they do raise quality standards. In Oregon when compulsory grade labeling went into effect, less than a quarter of the butter was high enough quality to be marked Grade A. A year later, three-fifths of it was graded A, creameries were making less and less Grade B, and Grade C had almost disappeared from the market. It was no coincidence that consumers ate more and more butter during the year, even though at that time drought was driving butter prices rapidly upward.

GRADE A butter in Oregon is butter that by Federal standards would rate "92-score" or better. "93-score" is about the highest marking that butter ever gets. Though only a fraction of America's butter is graded by Government graders, all butter at wholesale is sold by score. Some manufacturers use the Government grading service and present it to consumers with the certificate of grade in the package. It is the best assurance consumers can find for purity and high quality in the butter they buy.

POTATOES present an exception to the usual rule of high quantity—low prices. The fact that the big supply of potatoes on the market in early summer is made up of two overlapping season's potatoes—last fall's storage potatoes and this season's "new potatoes"—while prices are usually quoted on the new or more expensive kind, accounts for the discrepancy. Consumers who buy the old potatoes stored over from the Fall may still be able to make the rule work for them in the matter of low prices. The new potatoes will keep longer, making it more practical to buy in large quantity under the variety name that assures cooking and eating quality. (See "How do you Store?", in the Sept. 2, 1935, CONSUMERS' GUIDE, and "Facts for Potato Consumers", in the Feb. 10, 1936, CONSUMERS' GUIDE.) The chief contribution of potatoes to the diet is fuel in the form of starch for energy. Potatoes beat some of their competing fuels in the diet on counts of vitamins, minerals

(if baked or boiled in skins), and the fact that they supply an alkali rather than an acid residue.

BEETS are most valuable for their leafy tops. Though more roots than tops are eaten, the contribution of the roots to nutrition is a minor one. Beet greens, if not cooked too long, in too much water, or with soda, make a striking showing on the food value chart. They rate as "excellent" sources of Vitamins A, B, C, and G, with very rich supplies of iron, phosphorus, and calcium besides, to say nothing of their delicious flavor. This time of year consumers are more likely to find beets sold complete with fresh tops. To be sure of the best in the market, look for young, fresh, tender, and clean leaves. Sometimes when they are flabby and wilting, their freshness can be brought back if it has not gone too far. If they are slimy, pass them up.

CUCUMBERS make their own modest bids for attention in the matter of food value even if their claim as a flavor accent is sufficient to give them place on any menu. Though the facts are not all in, they are known so far to provide—like all vegetables—small quantities of necessary minerals, the necessary fiber to help keep digestive tracts in order, along with a good supply of Vitamin C. In looking for cucumbers to slice for salad, favor the firm, fresh, bright, well-shaped ones of good color, avoiding the kind that are shriveled or withered, or over-grown and puffy. If there is a dark sunken uneven place, it may mean decay which rules out that cucumber.

TOMATOES, one of the best gifts of nature to the diet and the taste, whether fresh or canned, are at their best for flavor in the fresh state in June. Though not as potent as orange juice in Vitamin C, they rate as "excellent" for Vitamin C, and the same for Vitamin A, as well as "fair" in Vitamin B. (See "Tomato Route to Good Health", in the June 3, 1935, CONSUMERS' GUIDE.)

CHERRIES get their special recognition as a "good" source of Vitamin C, and of course need no recommendation as providers of dessert sweetness and "appetite appeal" in a healthful way. Whether you buy the sweet cherries for eating fresh, or the sour cherries for pies and canning, good quality shows in a bright fresh

look, plumpness, and good color. To be ripe they should be plump and firm and the right color for the type, and juicy. If they are not ripe enough they may be small, hard, and not well-colored; if too ripe they look soft and dull, and the box may be stained because they are leaky. Look close for worm injuries, for decay in the form of small, brown, round spots.

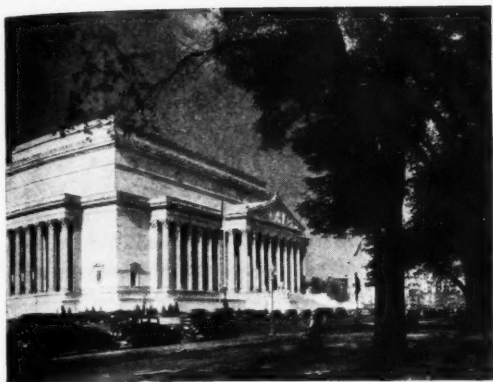
BANANAS are a good source of Vitamins A, B, C, and fair source of G, and high among fruits in carbohydrates for fuel. Though they used to be libeled as indigestible they have come into their own lately, when ripe, as an early food for babies. If you buy bananas for immediate use you can often get bargains in the fully ripened fruit which is tinted with brown and flecked with small brown specks. Even though the skin is entirely brown, if the flesh is firm and not discolored the banana may be in prime eating condition. Ripening that has gone too far shows in soft and mushy flesh. Bananas with tips still green or those solid yellow or red from stem to stern can be bought for cooking or for further ripening in the kitchen.

LEMONS AND LIMES are traditionally excellent sources of Vitamin C, the scurvy preventing "tooth-nutrition" vitamin, but they are also a fair source of Vitamin B as well. Look for fruit that is heavy for its size. Lemons are usually better if they are a deep yellow color, while green is the color for limes. When limes are yellow they are likely to lack the tartness we like in them. Mold is equally taboo in both lemons and limes, but limes also suffer "scald" which shows in purple or brown-colored spots and lowers the price without necessarily lowering the value very much.

CONSUMERS' QUERIES AND COMMENTS

[Concluded from page 2]

fixed relation, therefore, between the color of the egg yolk and the amount of Vitamin A, present. . . . On plants color is an indication of Vitamin A but not so much in animal products. In plants, green and yellow indicate the presence of the precursor of Vitamin A which is changed into the actual vitamin when eaten. In animal products, known as high in Vitamin A, the vitamin itself, a colorless substance, is there, but not necessarily in proportion to the yellowness of the product.



Rules and regulations of administrative departments are reported in the "Federal Register", a newspaper published daily except Sunday and Monday and days following legal holidays by an office of the National Archives, housed in this new edifice which is the repository for all important permanent records of the Federal Government.

CONNECTICUT'S Department of Agriculture reports that consumers in that State are receiving better potatoes this year as a result of a State law, in effect slightly less than a year, requiring that all potatoes sold at retail be marked with the grade they represent or the word "Unclassified". Grade marks are put on the packages in which the potatoes are sold. Enforcement of this law is the responsibility of the State Department of Agriculture which has recently made a check of its observance. Out of 24 samples collected from stores in all parts of the State, the department found only 5 which failed to pass the grade indicated on the outside of the packages. A year ago when 23 samples were collected from approximately the same stores, only 4 passed the grade which was advertised. Many stores in Connecticut, it is reported, are refusing to buy potatoes that do not pass the official United States or Connecticut grades.

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IMPROVING the chick means improving the egg which will later come to market. Last July Government poultry experts got under way a national uniform "flock improvement plan" which already promises to do much to increase the quality of eggs. Thirty-four States are now taking part in this plan under which producers start by eradicating disease from their flocks and adopt other measures to get "approved flocks." Still further improvements lead to the

Consumer-Farmer Briefs from Washington

next grade, a "certified flock." Third and highest, flocks work on a "record of performance." Thirty States are cooperating in one or more phases of both the breeding and disease-control program. Millions of baby chicks are being produced each week in the spring season. This is the first year that farmers and poultrymen have been able to buy chicks of the United States grades based on systematic classification of breeding flocks. Most chicks of these grades will, in addition, be from flocks tested for pullorum disease.

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HUNDREDS of tons of foodstuffs became the special charge of the Food and Drug Administration and other Federal and local officials when great floods in the eastern part of the country this spring swept into warehouses, railroad cars, and grocery stores. To insure consumers against risk from polluted foods, these officials shot into action, asking—and getting—the cooperation in their safety work from retailers, wholesalers, and railroads. Where carloads of food had been completely submerged, the authorities embargoed all the foodstuffs, and buried contaminated products. Local officials in 22 cities have reported the destruction of a total of 390 tons of fresh fruits and vegetables, coffee, tea, candy, cereals, flour, beans, dessert preparations, meats, shortening, butter, dried fruits, nuts, and spices, all of them foods beyond saving. Other untallied supplies had to be done away with.

SEIZURES under the Federal law, up to the middle of May, accounted for 580,000 pounds of sacked feeds; 25 tons of corn; 200 bags of unroasted coffee; 11,410 pounds of butter; one shipment of candy; 10,500 pounds of cheese. One enterprising dealer in Massachusetts, attempting to take advantage of the flood situation by reselling damaged goods, was scotched by the Food and Drug officials. This dealer bought up 10 cars of badly soaked stock

feed, signing an agreement to sell it for fertilizer only, and paid around \$6 a ton for the grain that originally sold around \$2 a sack. When the officials found the dealer was drying the grain, sifting out the mold and dirt, and selling the product again at stock-feed prices, they stepped in and put an abrupt stop to this business.

FOOD inspectors deal with flood-damaged foods in various ways, depending on the food. Dry products packed in sacks or cardboard containers—such as grain, flour, coffee, nuts—which had been watersoaked were either burned or buried. No chances were taken with these foods because bacteriological tests showed positive evidence that the flood waters were heavily polluted with germ life that might lead to disease. A carload of walnuts was among the "dry-food" casualties in a Pittsburgh warehouse. Shippers telephoned to see whether the nuts could be assorted, and part of them saved, but food officials had already inspected the lot and found that 93 percent of the nuts had water in the shells.

VEGETABLES like celery, lettuce, leeks, and cabbage, which are eaten raw, usually cannot be salvaged if they have become contaminated. Fruits, such as apples, oranges, lemons, grapefruit, bananas, which could be peeled or boiled sufficiently before eating, were salvaged by proper washing in a disinfectant.

FOOD in cans were treated still differently. Where the only damage done was loss of labels, the cans were washed with a chlorine solution, rinsed in clear water and dried quickly before they had a chance to rust. Many cases of canned goods were held up, after the disinfecting process, so that the packers might send new labels.

INSPECTORS handling foods in jars with screw tops—such as mayonnaise, peanut butter, chocolate malted milks, preserves—ordered these products destroyed if there was the least evidence that the jars, neither airtight nor watertight, had been in polluted water.

EMERGENCY protection for consumers such as this is only one of the many functions of the alert Food and Drug Administration, which is every day of the year on the watch for adul-

terated—and misbranded—foods which might hurt people or take advantage of slim pocketbooks.

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NEW YORK'S Department of Agriculture and Markets is campaigning against retailers of short-weight packages. Recently penalties of \$125 were assessed against 5 dealers for selling short-weight packages of tea. In 4 instances, where Department inspectors asked for "half a pound of tea", they were sold packages which the manufacturer had labeled "7 ounces." In the fifth instance the dealer said he had only "a quarter-pound package." This package, it was discovered, was marked as containing only 3½ ounces. New York's law permits the packaging of tea, coffee, and other commodities in any weight provided the weight is marked on the label. The Department takes the position that the practice of packaging commodities in such off-sizes as 15 ounces, 7 ounces, and 3½ ounces lends itself to deception by the retailer.

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FEDERAL home economists and extension workers have designed a practical new farm household account book which can be bought directly from the Government Printing Office at Washington, D. C., for 15 cents. Ask for "Farm Family Account Book."

PRINCIPLES and purposes of budget making and account keeping are discussed. Thirty thought-provoking questions on spending habits aid in a year's planning. There are pages for estimating the year's expenses, for summarizing them, and for estimating the family's net worth. The account book takes into consideration irregularity of farm income, management of charge accounts, and value of food and fuel furnished by the farm.

AN important innovation is a page for showing large expenditures that fall due in some months and not in others, and the money that will be available to take care of them. Taxes, insurance, and interest are examples. Many account books have been discarded because they seemed to police personal expenditures too rigidly. The new book suggests a weekly or monthly personal allowance—that need not be itemized—for each member of the family.

ANY spending plan, to be useful, must be flexible, authors of the book say, so the system recommended permits revisions as necessary to fit family situations.

[Concluded on page 23]



COOPERATION



THE FIRST tractor to be designed by farmers and to be manufactured by and for farmers through cooperative organization has been on demonstration in recent weeks at various places in middle western States. This "CO-OP" tractor is built with a high compression motor, with six cylinders, an electric starter as standard equipment, and is intended to be run with high octane fuel. It has been built to be adaptable for all types of farm work.

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"WE are tired", states an editorial in a prominent food trade journal, "of answering individual questions about the possible dangers in a movement toward cooperative consumer ownership of retail stores. So, once for all. No!! We feel quite sure that this is just another spook that people insist on seeing under the bed.

"THE history of consumer cooperation shows that there are but two conditions under which consumer cooperation is successful: (1) When the sluggishness of competition amounts to monopoly. (2) When consumer agreement is necessary to establish a new item in trade. The latter is irrelevant. The former does not apply to our present food trade nor to many other trades.

"WHEN the Rochdale Society was started during the industrial revolution in England by 27 families who were so poor that they had to save for a year to amass their capital of about \$140, the sluggish competition of that day was not geared to our present super-market speed. Established out of abject necessity, it was later adopted as a financial unit by British trade unions and became an integral part of their crusade.

Many farmers and consumers are exploring the cooperative way of making and marketing their necessities as a two-way route to a greater purchasing power and a better living. Farmers look to cooperative purchasing to cut their costs of production and to gain for themselves a larger share of consumers' dollars. Consumers look to cooperation to cut their living costs and to make possible greater consumption of farm products. From time to time we report some of their cooperative activities.

"IN the early days of the Grange, the Farmers' Alliance, and the Farmers' Union, muddy roads and restricted buying radii caused local petty monopoly prices by retailers that farmers were obliged to break up by a system of cooperative purchase. When ac-

tive competition was brought in by mail order catalogs and improved roads these stores were discarded. The limited number of essential staples handled successfully by these early co-ops were the very items that are now being generally used as loss leaders to draw customers into the stores. For a co-op to succeed now in competition with our throat-cutting loss leaders would be surprising."

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A GAIN in sales of over 20 percent in 1935 over 1934 is reported by the State Exchange of the Nebraska Farmers' Union. Business last year totaled \$1,635,125, not including sales of its retail branches. Net savings on this volume were \$71,805, a 15 percent gain over 1934.

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MARKETING wool cooperatively brought higher prices last year to growers who disposed of their supplies through the Illinois Livestock Marketing Association, it is reported. They received an average of 5.48 cents a pound, or 25 percent more than the price received by growers not in the pool.

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TRANSPORTATION costs from mid-Western sources of supplies are given as the reason behind the acquisition by the Pennsylvania Farm Bureau Cooperative Association, Inc., of a financial interest in the Southern States Cooperative mills, located at Baltimore, Md.,

and owned by farmers. These mills are able to take in coastal grain, molasses direct from Cuba, cottonseed from the South, and other material that must be brought long distances. Their manufacturing capacity is from 30 to 40 cars a day. All kinds of feed are produced for dairy, poultry, and hogs, and are made on open formulae. Farmer-members in the eastern part of Pennsylvania expect to look to this source for their supplies, while farmers in the western end buy "Farm Bureau Feeds" from the Farm

for present and prospective cooperative employees has been authorized for this fall. The training school is expected to be held in Superior, Wis., under the direct supervision of the Central Cooperative Wholesale and the Northern States Cooperative League.

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TWELVE Cooperative Institutes drawing students from 30 States, have been set up for this summer. Three of them will be held by

the Eastern States Cooperative League. Featured in these summer schools will be general and technical courses on cooperation for students and prospective leaders, and special sessions on cooperative recreation and culture.

A National Cooperative Recreation Institute at Columbus, Ohio, is planned for June 1 to 13, to be followed by regional recreational institutes in each section of the country. The Northern States Cooperative League will conduct its first cooperative institute at Maple Plains, Minn., from June 7 to 21, with similar institutes at Cloquet and Lake Eshquagama, Minn., and in upper Michigan later in the summer. The American Peoples School will hold a special Cooperative Leadership Summer School in New York City from June 27 to August 15. The Central States Cooperative League plans an institute at Ashland College, Grant, Mich., to run from August 30 to September 5. Two additional seminars are scheduled for

Chicago and adjoining areas.

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A COMPREHENSIVE bibliography, the first of its kind, covering books and articles on credit unions has been announced for publication. It includes a list of more than 700 separate titles, covering material published as far back as 1857, but emphasizing particularly material appearing since 1921. Anyone interested in this form of cooperative organization will find this a convenient reference book. Inquiries should be directed to Clarke J. McLane, President of the Library of Congress Federal Credit Union, Washington, D. C. We pass on this information because of the many inquiries reaching the Consumers' Counsel regarding Credit Unions, which are the special charge of the Credit Union Section of the Farm Credit Administration in Washington.



Cooperative purchasing of feeds is an important part of the business transacted in this store operated by the Tuscaloosa County Farm Bureau Exchange in Alabama.

Bureau Milling Company at Chicago, in which the Pennsylvania Farm Bureau Cooperative Association, Inc., is an equal stockholder with Ohio, Indiana, Michigan, West Virginia, and Wisconsin cooperatives.

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COOPERATORS are going to school. The Central Cooperative Wholesale, with headquarters at Superior, Wis., which did a business of over 2 million dollars last year and services 101 member retail societies, 54 of whose members showed a retail business exceeding 5 million dollars in 1935, is starting the organization of a National Cooperative College. The primary function of this college, it is planned, will be to train managers and employees for cooperatives. As a first step in this educational program an 8-weeks training school



Animals Help Science in the Hunt for Human Health

Second of a series on
the search for vitamins.

PIGEONS completely paralyzed by restricted diet can rise up and fly after eating one-thousandth of a thimbleful of crystals made by scientists searching for the secrets of Vitamin B.

MIRACLES like this are happening every day in laboratories where the quest for the cause and cure of human illness goes on. Animals are the first assistants of researchers in vitamins in the Nutrition Studies Laboratories of the Bureau of Home Economics of the Department of Agriculture, just as they are in other nutrition laboratories all over the world, for their short span of life can be completely controlled in every phase. One element of diet at a time can be left out, added in different degrees, by means of different comparable foods, and studied thoroughly, while every other factor is kept the same.

VITAMIN B is still more of a mystery than some vitamins discovered since, though its discovery led the way to the whole theory of vitamins. When first it was found that the polishings of rice could cure nerve diseases in pigeons and chickens and could also make rats grow, the first conclusion was that one "vitamin" which received the name "Vitamin B" did the whole job. Then it was found that one Vitamin B concoction, after being heated for a long time, could still cure polyneuritic birds but was no longer able to stimulate growth in rats. Other experiments made it clear that what they had thought was Vitamin B was not just one vitamin but a "complex" with at least two separate parts doing separate things. One "factor" cured nerve diseases and was not damaged by heat, and another promoted growth but could not stand high temperatures.

IDENTIFYING these factors was the next problem. At last they not only isolated the antineuritic factor, but two researchers working at opposite ends of the earth found the same

chemical formula and made the same Vitamin B preparation from different foods. One five-billionth of a pound a day of this was enough to keep a pigeon from getting polyneuritis. This antineuritic factor kept the title to Vitamin B. American scientists separated out and rechristened the growth-promoting factor called "Vitamin G", though in England the two are called "Vitamin B¹ and B²." But the end is not in sight. Some scientists have estimated that when all the factors of the original Vitamin B complex are tracked down, there will be at least seven of them. Meanwhile researchers have learned more and more about the antineuritic Vitamin B, rarest and most variable factor in food.

ABSOLUTE LACK of Vitamin B causes beriberi in human beings. For centuries this nerve disease has taken a terrific toll among Oriental people living on polished rice. Beriberi doesn't happen much among people that live on a varied diet. But nutritionists are hinting that some of our most common ailments which we try to cure in many different ways, may come because we don't get enough Vitamin B. Such minor symptoms as feeling generally "out of sorts", dreary, uninterested in food and unable to digest it properly when we do eat, are among the proved results of a diet too low in Vitamin B.

ACTIVITY and growth call for extra supplies of Vitamin B. The more exercise people get, the more Vitamin B they need, and if they are also still at the growing age their need is just that much more acute.

FOODS that are less processed, less refined, or eaten raw, are more likely to have all vitamins. Brown rice contains Vitamin B, while polished rice is completely lacking in it. The germ and bran of wheat are good sources of

[Concluded on page 21]

Studying Consumer-Buying Problems

Many colleges and high schools report to us that they have added consumer study courses to their curricula and ask for suggestions on their plans for study. An invaluable guide to such teachers of secondary school and adult classes has just been published by the Office of Education of the United States Department of the Interior, under the title "Consumer-Buying in the Educational Program for Home-making." Copies may be obtained from the Superintendent of Documents, Washington, D. C., for 20 cents. . . . From the many outlines of study projects and suggestions contained in this bulletin, we give here one plan used by a teacher in Arizona with an eleventh-grade food-management class which wanted to learn how to get more value from the dollars spent for food.

Objectives set up for the study:

- Recognition of the best division of food dollars to satisfy nutritional needs.
- Recognition of the relative cost of various food materials.
- Interest in palatable yet economical meals.
- Understanding of how dollars spent for food may be better spent.

Specific objectives:

In order to reach the last of these four objectives, the following specific objectives were set up:

- Recognition of the vast number of food commodities that the homemaker must buy.
- Recognition of the kind of information available to the food purchaser.
- Realization of the need for more definite information concerning food products purchased.
- Understanding of some of the present laws and bills that affect the way in which money is spent for food.
- Recognition of the need for further legislation for protection of food consumer.
- An interest in promoting further legislation affecting the purchase of food.

Outline of what was included and experiences of pupils to help them attain the objectives:

- I. The large number of food products available—
 - A. The variety available in food products commonly used in the day's meals.
 - B. The large number of brands, qualities, and forms that may be secured in a specific food product.

- C. The wide range within the brands that are represented by different grades of a particular product packed by the same packing company:
 - Fancy grade.
 - Choice grade.
 - Standard grade.
 - Substandard grade.
- D. Variety available in less commonly purchased food products.

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IN STUDYING the above the girls reported dishes served on the previous day and the class grouped articles of food purchased according to frequency of use and type. The girls visited a grocery store and noted the number of different brands of a particular food commodity on the shelves, such as: Oatmeal; canned tomatoes; canned peaches; canned salmon.

EACH girl selected a specific food and investigated forms and qualities available in the market, such as:

Pineapple: Sliced, crushed, tidbits, juice, broken slices.

Tomatoes: Solid pack, juice, pureed, sub-standard.

Sardines: Packed in olive oil or vegetable oil.

They observed a particular part of a grocery store to find less frequently made food purchases, such as: Mushrooms; tomato paste; bean sprouts; canned celery; canned pickled peaches.

SOME girls took such unusual foods as canned celery, canned artichokes, pickled peaches and figured the number of servings in a unit of each

and approximate cost per serving. They decided in what type of menu these could be used economically, as: Canned pickled peaches used as a substitute for salad; canned celery used in salad when the celery is out of season and the juice may be used for soup. They considered when it would be unwise to buy these types of foods, as: Imported fish pastes in sandwiches when less expensive material such as sardines might be used; mushrooms used with steak when an expensive dessert and salad are included in menu.

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II. Helps commonly available in buying food and their value to purchasers:

A. Kinds of help available:

1. Labels:

Helpful information that may be given on the label; limitations of help from food labels; the way in which the Government has regulated labeling on food products.

2. Grades:

The types of foods that are graded successfully now; possible types of grading and relative merits of each, such as: A, B, C; 1, 2, 3; descriptive.

3. Advertisements:

The types of advertisements from which information is secured; limitations in advertising as a guide to buying; information of value to the buyer.

4. Salespersons:

Value of aid dependent upon its extent and accuracy; what consumers can do to use salespersons as an aid to buying.

5. Brands (trade marks), and seals of approval:

Advantages and limitations of brand names; uniformity of quality of goods sold under given brand; the extent to which it enables buyer to identify article with certain quality. For example: Aids in selecting for trial from a large number of untried articles; advantages and limitations of seals of approval.

B. The good and questionable effects of such helps on buying habits.

IN STUDYING the above, class members assembled labels from as many different types of food products as possible. Each girl took 1 or 2 labels from different types of foods and analyzed what the labels may tell the food buyer if she reads carefully, such as: Weight or measure of can contents; number of pieces of fruit; addition of coloring.

A NUMBER of labels from specific foods such as canned pineapple, canned peas, coffee, were collected by each girl for a specific food. Information given on different labels from the same product was compared.

CLASS members worked out what they believed to be an ideal label for their particular product. They investigated the types of foods graded, as: Milk—Grade "A"; fresh Ranch Eggs (large, medium, small); canned fruit—fancy, choice, standard, substandard, and pie fruit. Then they discussed the difference between descriptive labeling and grade or letter labeling. A group of girls read the available material on different types of grades and held a panel discussion on "The comparative value of the different types of labeling to the consumer."

SEVERAL grades of canned food put out by one company with different brand names were studied. The point that knowing the brand name for a given grade is of some value to consumer, but has its limitations, was emphasized.

FOOD ads from magazines, newspapers, handbills, etc., were collected and the girls determined how much these ads actually tell the food buyer by finding out the actual number of percentage of words, phrases, or terms appearing in the advertisement that give information. They underlined such information with colored pencil to make it outstanding, having decided what terms really described the product.

APPEALS in advertising food used to make us buy were considered, such as:

Nutritional value. (Appeal to health.)

What the doctor says about it. (The appeal of an authority.)

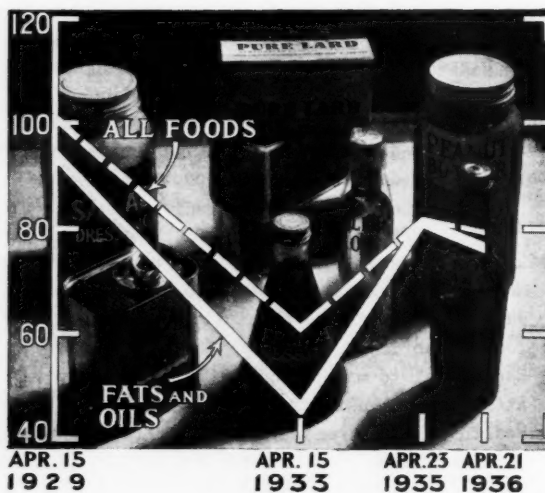
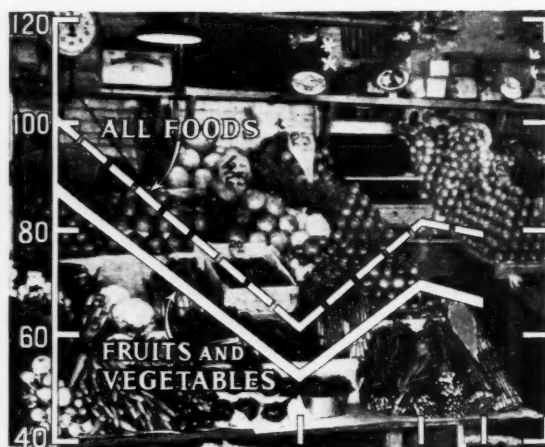
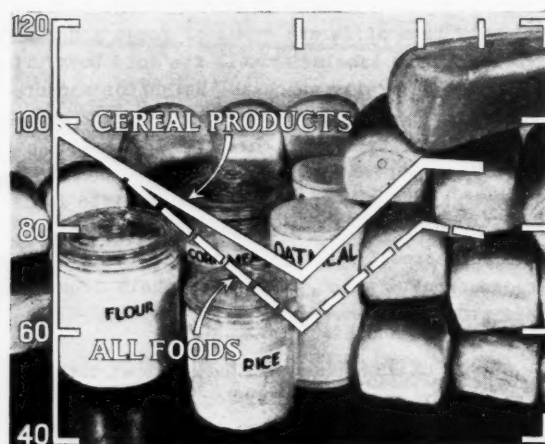
Economical to use. (Appeal to save money.)

Attractive illustrations. (Appeal to beauty.)

Health of children depends upon it. (Appeal to health and love of children.)

[Continued on page 22]

A PERSPECTIVE OF FOOD COST CHANGES 1923-1925 = 100



Your Food Costs

W IDESPREAD rains over most of the Great Plains area during the first half of May brought prospects of better crop conditions than had previously been reported. This region had been sorely lacking in moisture. Precipitation in Kansas, Oklahoma, and Texas was below 1934, the year of the great drought. Recent rains are expected now to speed up growth of pasturage and the planting of spring crops, both of which were delayed by a late spring east of the Rockies. Well distributed rains are still needed because there is a scant supply of sub-soil moisture in the southwestern area.

DROUGHT in the dust bowl of the southwest during April caused a 6 percent reduction in winter wheat prospects. May rain may aid the crop, but a large acreage has been abandoned already because of lack of moisture. The May 1 crop forecast dropped to 464 million bushels, marking the fifth light winter wheat crop in succession. This will not mean a wheat shortage, however, because the expected 20 percent increase in spring wheat acreage at normal yields will result in a total crop in excess of average domestic needs.

RETAIL food costs advanced 1 percent from April 7 to 21 but on the latter date were still below their April 1935 level. This upward movement marked the second interruption to the downward course of food prices which began at the end of 1935. Bad weather caused a temporary advance late in February. The recent increase may be considered principally seasonal, with prices of some foods pushing up slightly from low price levels reached earlier in the year.

INDEX of retail food costs on April 21 as reported by the Bureau of Labor Statistics reached the half-way point between the high food costs of April 1929, and the low food costs of April 1933. The April 21, 1936, index was 79.7 percent of the 1923-25 average. On April 15, 1929, the index stood at 100.8 while on April 15, 1933, it was 60.1.

FRESH vegetables and fruits registered the major increase in cost during the 2-week period, mainly as a result of higher potato

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prices. The cost of meats and eggs increased slightly from April 7 to 21 but dairy products as a whole remained unchanged in cost. All food groups, except sugar and sweets, continued below their April 1935 level.

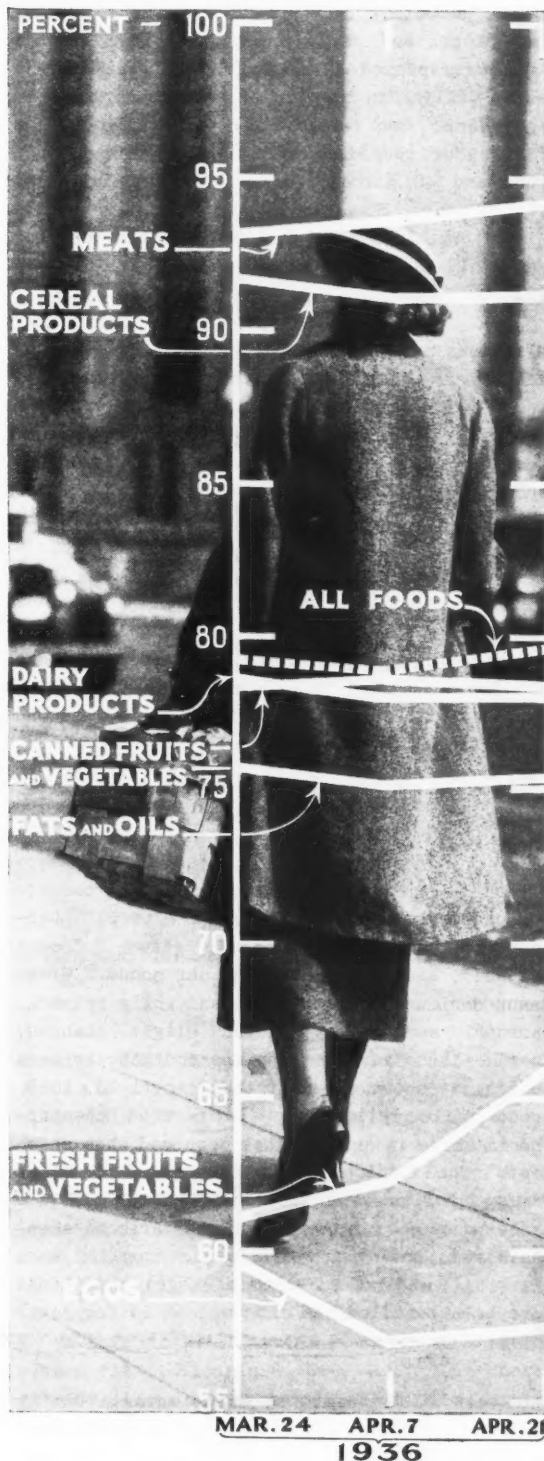
INCREASING farm prices accompanied advancing retail food costs during April. The general level of farm prices had been going down since last December. From March 15 to April 15 the trend was broken, and the index of farm prices rose one point to 105 percent of the pre-war level. Last April the index stood at 111. Prices of goods purchased by farmers remained unchanged during the month, and this also aided farmers.

PRINCIPAL farm price increases occurred in meat animals, potatoes, and chickens. These were the only three foods selling at prices to farmers above their April 1935 level. The largest increase occurred in potatoes which were selling for 81.1 cents a bushel at farms compared with 49.1 cents in mid-April 1935. Seasonal farm price declines were heaviest in the case of eggs, butter, and wheat.

POTATO supplies in general continued relatively scarce during April. New potato shipments expanded at a rapid rate, but this increase was more than offset by a smaller old potato movement. Materially increased new potato supplies are not expected until late in May and early June when the delayed crop will be available in greater than usual volume. Florida has been supplying the bulk of shipments and much of the stock is immature and of ordinary size and quality. During May shipments from Alabama, Texas, Louisiana, California, and South Carolina should augment those from Florida.

POTATO prices to consumers jumped from 2.6 to 2.9 cents per pound during the 2-week period. Prices were higher in 47 cities, being 46 percent above last April's level. The reported retail price figure does not give a clear picture of the potato situation at this time of the year because it contains retail prices of both old and new potatoes. New potato prices should start to decline at the end of May as shipments increase.

A CLOSE-UP OF FOOD COST CHANGES 1923-1925 = 100



SPRING lettuce and new onion shipments should reach their peak movement in May. Shipments of both crops increased markedly during late April and early May. California lettuce has now replaced Arizona lettuce. This year's early California crop is 10 percent larger than last year. The Texas spring onion crop is the largest on record being 84 percent above last year and 40 percent above 1932, the previous record year. Supplies of old onions are negligible, small amounts being available at this date only because of cool weather.

GREEN peas, tomatoes, and snap beans also were available in larger quantities during late April and should continue to increase during May. Tomato prospects during May will depend largely on weather conditions in Florida, for heavy May rains in past years have damaged crops. May tomatoes also come from the lower Rio Grande Valley of Texas, and here the crop is estimated at about twice as large as last year's 540,000 bushel crop. June should find large tomato shipments arriving from other sections of Texas where a record acreage is forecast. Snap beans during May come principally from Florida, and here a larger than average production is expected. The green pea crop from the second early producing States is slightly below last year's production but it is about 33 percent above the 5-year average.

FRESH vegetable prices to consumers with the exception of green beans and carrots increased seasonally from April 7 to 21. Cabbage was up 0.4 cent per pound, lettuce 0.3 cent per head, and onions 0.2 cent per pound. Green beans declined 1.8 cents a pound while spinach, carrots, and celery showed slight changes. Despite these advances, onions and cabbage were selling at about one-half their April 23, 1935, price while lettuce was 13 percent cheaper. The increase in onion prices occurred when shipments of old onions dropped sharply before new Texas supplies were fully under way. Lettuce prices rose during the period when Arizona shipments were ending and California supplies were starting for market. Both of these conditions have been remedied and the outlook is for lower May prices.

EGG receipts at major markets during the first 3 weeks of April were 10 percent above the same period in 1935. The quality of eggs

shipped was below that in past Aprils. This has discouraged egg storage, and movement into storage continued at a conservative pace. Storage supplies this year have been extremely low with operators cautious because of huge losses suffered last year. Production of eggs during May and June should continue in excess of corresponding months last year.

EGG PRICES to consumers advanced seasonally 0.3 cent per dozen from April 7 to 21. Further price increases may be expected from May to November but prices should continue below last year's level. This rise was the first retail price increase registered since February 25. Retail prices were still 7 percent below April 23, 1935.

SPRING BROILERS are now coming to market. Some of the early arrivals were light in weight, but later supplies should be of proper maturity. Poultry prices have been going up recently, but after May they should start downward.

ABUNDANT pasturage and warmer weather during April resulted in further seasonal increases in milk and butter production. Rains advanced plant growth, and cows in most areas are now on pasturage. Milk production per cow should reach its peak in June. Medium and low-grade butter has been relatively scarce, but improved pasturage conditions in the South and Southwest should remedy this situation.

RETAIL butter prices declined 0.1 cent per pound from April 7 to 21. On the latter date they were 5 percent below last April's price. An active demand for butter has retarded the rate of price decline. The wholesale price of 92-score butter in New York declined 3.5 cents per pound from April 18 to May 2. Consumers should expect lower retail prices from now until June as the seasonal increase in production is now under way.

AVERAGE retail white bread prices remained unchanged during the 2-week period. Price increases were reported in 7 cities, with decreases in 10 others. Major changes were limited to Norfolk, where prices declined 0.3 cent per pound, and Dallas and Oklahoma City where 0.3 cent advances were reported.

MEAT SUPPLIES with the exception of lamb continue to be larger than last year. Feed prices are still low compared to live animal prices and this has encouraged farmers to market stock at heavier weights. Hogs have been running over 10 pounds heavier than last year. Quality of beef has improved with larger amounts of medium and good grades slaughtered. Lamb supplies appear to be low temporarily.

LEG OF LAMB, lamb chuck, and rib chops advanced about 1 cent a pound from April 7 to 21. Lamb retail prices were still only about 7 percent higher than this time last year. With marketing of the delayed spring lamb crop, lower retail prices should be expected early in June or late in May.

BEEF slaughter has continued larger than last year with good prospects for continuance of larger supplies. On April 1, the number of cattle on feed in the 11 Corn Belt States was 28 percent above 1935.

RETAIL beef prices on April 21 were 10 percent below prices on this date last year. From April 7 to 21, sirloin steak advanced 0.3 cent per pound while other cuts showed slight changes. Prices of live steers at Chicago have been going down since the second week in April, with small changes in the price of dressed beef.

MONTHLY hog slaughter during the remainder of the current marketing year, which ends September 30, is expected to continue larger than last year. Supplies after September probably will show further increases, because slaughter of the past 2 years has been at a relatively low level. Pigs from the large 1935 fall crop should move to market in volume during May. The total number of hogs slaughtered the current season will probably not be as large as last season because of light receipts prior to March. However, total tonnage is expected to be larger because hogs marketed this year have been much heavier than in 1934-35. This will not bring total tonnage up to levels of other recent years.

RETAIL fresh pork prices continued upward during the 2-week period, but were at about the same price level as last April. Chops and loin roast each advanced 0.5 cent per pound.

Strip bacon was 0.3 cent per pound higher while lard was slightly higher.

FIRST shipments of Imperial Valley cantaloups and California cherries arrived at market during the latter part of April. This year's shipments were earlier than last year. Cantaloup receipts should increase in May with the bulk of arrivals in June.

CALIFORNIA VALENCIA or summer oranges are now coming to market and shipments should increase until July, the peak month. These oranges will replace California navel and Florida supplies which have been on the market since last November.

FIRST watermelons should begin to arrive late in May from Florida. Shipments from Georgia and California will augment those from Florida in June. The Florida acreage is 20 percent below last year and only one-half the 5-year average.

STRAWBERRIES continued to arrive at markets in larger volume during April. Demand for berries has been good despite large supplies and growers are having a profitable season. Louisiana has been supplying the bulk of the berries but other Southern States will start shipping in May and June. Strawberries should be available in fairly large quantities until early in June, with resulting lower prices.

ANIMALS HELP SCIENCE IN THE HUNT FOR HUMAN HEALTH

[Concluded from page 15]

supply, which puts whole wheat bread and cereal on the preferred list for young people, along with whole corn, oats, barley, brown rice, and rye, and various kinds of beans and nuts. Rated as "excellent" sources of Vitamin B by the Bureau of Home Economics are chicken and lean pork. "Good sources" are egg yolk, lean beef, liver, kidney, heart, and brains. Since plenty of milk is a "must" for other needs, the Vitamin B provided by a full milk quota comes to a fair total. Most vegetables and fruits have a little Vitamin B, but if they are cooked too long, or in much water, which is afterward wasted, or with soda, much of the vitamin value is lost.

STUDYING CONSUMER-BUYING PROBLEMS

[Continued from page 17]

WHAT to look for in an advertisement that is actually of value was considered as: Size, as in olives; color, as green, white asparagus; type of pack, as in tomatoes; quantity, as number of slices of pineapple; price; uses.

EACH girl chose one food product that she buys or would buy if better prepared to do so and suggested things she might wish to know about this particular food. She visited a store and asked the salesperson for this information. Then, from inspection of advertisements, labels, or any other aids, she learned how much of the desired information she could obtain. The class discussed why a better purchase could be made if such an analysis were made.

THE girls determined the approximate amount of money spent by their families on food during the year. Considering this as an investment, they compared the amount of time spent in planning for this investment with the amount of time spent in using a similar amount of money on some other commodities as: Radio; automobile; refrigerator; stove; clothing.

NEXT the girls selected a food advertisement from magazines and eliminated all identifying terms. Played a "guessing game" to see how many of the advertisements girls could identify with the correct product. From the results they determined whether advertisements put the product before us as food buyers. The point brought out was that advertisements affect food purchases by causing us to overlook less well-known products equally as good; causing us to buy without investigation.

SLOGANS of food products were collected and flashed before the girls to let them see if they could tell the product advertised.

THE GIRLS considered the actual value of slogans to food buyers and the extent to which slogans influence their purchase of such foods. Girls listened to a radio program for some food product and reported the actual information given. They considered the ways used to bring the particular food product to the foreground as: Testimonial; recipes; children's programs; drama; music; contest. From "listening in" they considered how much of an aid the radio can be.

NEXT the girls investigated food products for approval seals found on foods. They read approval seals carefully to see what they mean. They selected examples of commercial and professional seals of approval and compared their value and limitations. They examined some commercial booklets published on food products and determined what aid they may be as: Affording suggestions for variety; giving recipes; showing pictures of finished product.

THE class considered how they would decide what booklets to keep on the kitchen work shelf as: Reliability as source of information; extent of information; accuracy in information; usefulness of material.

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III. Federal Government aid and its value to the buyer of food.

A. Types of Government aid:

1. Legislation passed:

Federal Food and Drugs Act of 1906.
Mapes amendment to Federal Food and Drugs Act.

2. Legislation pending:

Proposed changes in Federal Food and Drugs Act.

3. Federal bureaus:

United States Bureau of Agricultural Economics.

Bureau of Home Economics.

United States Bureau of Standards.

B. Further aid that might be given by the Federal Government, such as:

1. Provision for more effective enforcement of laws in existence.

2. Further provision for grading and inspection of food products.

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IN studying the above, the girls read portions of Federal Food and Drugs Act on labeling and sanitary requirements. They considered how this protects the food buyer. They discussed the methods used for the enforcement of Federal Food and Drugs Act; investigated the number of people employed in the enforcement of this act as compared with the number employed in enforcing some laws such as: Police and traffic regulations; control of disease in plants and animals.

REPORTS by the Federal Food and Drugs Administration on cases investigated were read and

the girls discussed these as a basis of evaluating the Act as a source of consumer protection.

A COMMITTEE of girls compared some labels for canned salmon using only the Federal Food and Drugs Act requirements as a basis for the labels. Some girls dramatized the purchase of this canned salmon, noting the questions that may arise on making choice on basis of these labels such as: Is the salmon pink or red? Is it packed in large or small pieces? This brought out the limitations in labels of this type.

A COMMITTEE of girls investigated Mapes' amendment to see how the label would have to be altered to meet these requirements such as: Specific grade (A, B, C); above substandard quality. The class discussed further need of Government aid on the matter of labeling.

A PERSON from the community interested in food legislation gave the girls a talk on pending legislation. This was used as a basis for a discussion of the additional points in the new legislation and its value to the food buyers, as for example, more control of advertisements.

GIRLS brought in instances of services which bureaus established in Washington can render the food buyer. They found out from stores that weights and measures are standardized, bringing out from this what the Bureau of Standards does to aid the food buyer in obtaining quantities desired.

ONE girl showed a series of cans of different sizes to see if the others could tell what number they represent and how much they contain. The class discussed the value of knowing how much each can contains and approximately how many servings and considered when it would be economical to buy different sizes of cans, such as: No. $\frac{1}{2}$ size can of deviled meat for canapes, no. 10 size can of blackberries for jam. New sizes of cans were considered and advantages and disadvantages suggested.

THE GIRLS investigated the score card for butter that has been developed by the Bureau of Agricultural Economics and scored several different unbranded samples of butter by this; they discussed other kinds of products that might be scored and observed that standards or scores may become mandatory if the State so rules. The

class considered how this would be an aid to the food buyer.

MATERIAL sent out by the Bureau of Home Economics for the buying of canned foods was investigated and the class considered how useful this material would be to the food buyer.

FINALLY, a panel discussion was held on a topic chosen from these three:

"How the Government Could Improve Its Aid to the Food Buyer" or

"What Can I Do as a Food Buyer to Encourage Better Legislation for the Food Buyer" or

"What New Legislation Would Help the Food Buyer."

CONSUMER-FARMER BRIEFS FROM WASHINGTON

[Concluded from page 12]

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BUYING "butter" and paying for water is a trickery that doesn't work when Food and Drug officials get on its trail. Here is the story of a shipment of butter, valued at \$2,300, which crossed the trail of these officials. The Kansas City office of this Administration telegraphed to the Chicago office that this shipment was on its way, going by truck. Chicago officials sought it out, and on testing the butter found that, contrary to the law, the butterfat ranged from 76.66 to 79.35 percent. Standards enacted by Congress in 1923 require that butter sold in interstate commerce must be 80 percent butterfat.

OWNERS of this shipment obtained a court order permitting them to rework the butter to comply with the standards. Before granting the order, the court required the owners to admit that the butter was illegal and to post a bond guaranteeing it would be reworked under supervision of the Food and Drug Administration and would not be disposed of contrary to provisions of the Act.

WHEN the 8,384 pounds were reworked, there were only 7,829 pounds left, a loss of 555 pounds. These 555 pounds were originally in the butter as water which consumers would have paid for at butter prices. This would have amounted to between 1 and 2 cents for excess water in each pound purchase.

Our Point of View

THE CONSUMERS' GUIDE believes that consumption is the end and purpose of production.

To that end the CONSUMERS' GUIDE emphasizes the consumer's right to full and correct information on prices, quality of commodities, and on costs and efficiency of distribution. It aims to aid consumers in making wise and economical purchases by reporting changes in prices and costs of food and farm commodities. It relates these changes to developments in the agricultural and general programs of national recovery. It reports on cooperative efforts which are being made by individuals and groups of consumers to obtain the greatest possible value for their expenditures.

The producer of raw materials—the farmer—is dependent upon the consuming power of the people. Likewise, the consumer depends upon the sustained producing power of agriculture. The common interests of consumers and of agriculture far outweigh diversity of interests.

While the CONSUMERS' GUIDE makes public official data of the Departments of Agriculture, Labor, and Commerce, the point of view expressed in its pages does not necessarily reflect official policy but is a presentation of governmental and nongovernmental measures looking toward the advancement of consumers' interests.

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